

Xerox File No. A1466-US-NP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Applicant: Aaron S. Witt, et al

Application No. 09/943,397

Filed 08/30/2001

Title: SCANNER-INITIATED
NETWORK-BASED IMAGE INPUT
SCANNING

Confirmation No.: 8229

Group Art Unit: 2194

Examiner: Andy Ho

Customer No.: 25453

Sir:

APPEAL BRIEF PURSUANT TO 37 C.F.R. 1.192

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APPELLANT'S BRIEF ON APPEAL

Appellants hereby appeal to the Board of Patent Appeals and Interferences from the Examiner's Final Rejection of claims 21-29, which was contained in the Office Action mailed 08/08/2008.

A timely Notice of Appeal was filed 10/16/2008.

Real Party In Interest

Xerox Corporation is the real party in interest.

Related Appeals And Interferences

No appeals or interferences are known which will directly affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

Status Of The Claims

Claims 1-20 are cancelled.

Claims 21-29 are pending.

Claims 21-29 are on appeal.

Appendix I provides a clean, double-spaced copy of the claims on appeal.

Status Of Amendments

No Amendments have been filed since the Final Rejection.

Summary of Claimed Subject Matter

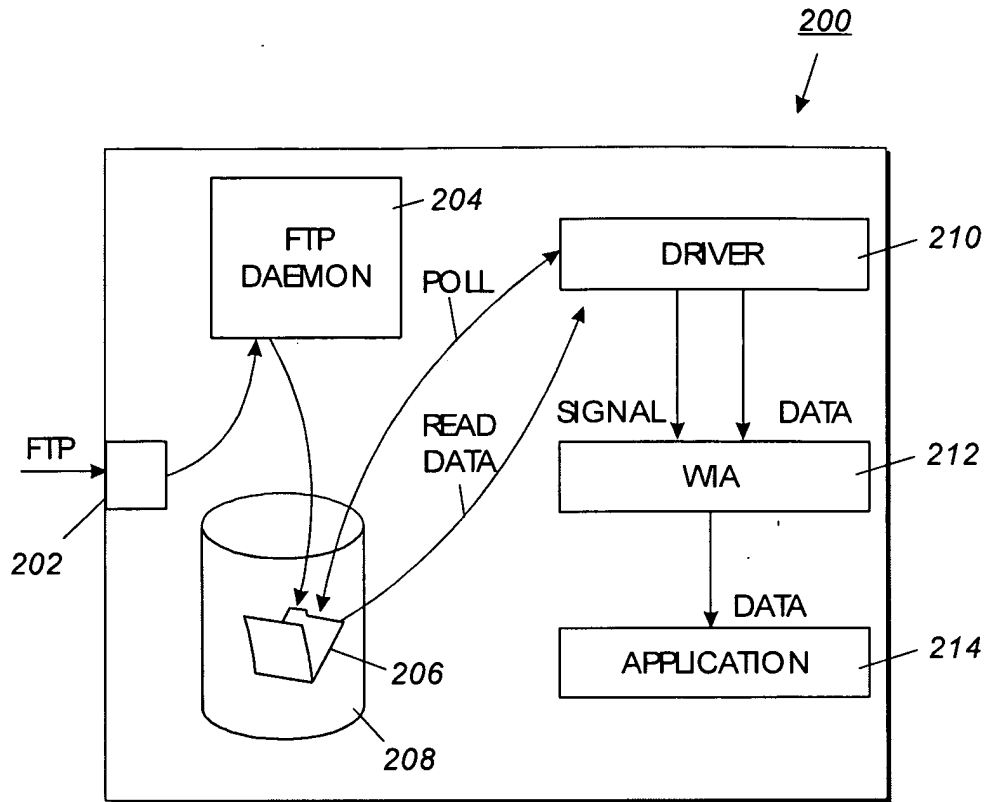
The present invention relates to scanning of hard-copy images to computers ("input scanning") in a networked environment. In the basic case, in a typical "networked" office there is a population of scanners (some of which may be effectively parts of digital copiers), which output image data from scanned documents; and a population of computers, one of which can be selected as a "destination computer" for an image being scanned at one of the scanners.

Currently, for input scanning in the network context, it has become familiar to use a "scan server" as an intermediary between one or more scanners and a population of possible destination computers. In brief, the "scan server" is a central computer that in effect acts as a clearinghouse for image data flowing from scanners to selected destination computers in a network. A diagram explaining the use of a network server in the prior art is shown as 99 in Figure 1 as filed.

The present invention is directed to a method and apparatus wherein a scanner may directly send image data to a particular destination computer on the network, *without an intermediate scan server*.

With the claimed invention, an intermediate scan server does not need to be interposed between a population of scanners and a population of possible destination computers. Instead, the claimed invention enables a system whereby each possible destination computer (and there may be any number of such computers) acts as its **own** scan server. Because the claimed method obviates a need for a central scan server, the claimed method also enables scanning operations to be **initiated** at a scanner, i.e., without having to send a command to a scan server.

With respect to the recited elements of the claimed invention, Figure 3 as filed is a diagram of a *single* computer 200 of a population of possible destination computers, as described in the Specification as filed at page 5, line 14-page 6, line 9. Figure 3 is reproduced on the following page.



In brief, with the present invention, in *each* possible destination computer 200, a predetermined port 202 is assigned to accept files from a scanner. The port 202 is associated by the daemon 204 with the root directory of the computer 200, which in turn directs the incoming image data to a "target file" 206. The "target file" 206 of the destination computer is polled at all times to check for incoming images from a scanner, regardless of whether any image data was expected at any time. The present invention thus provides software by which each possible destination computer 200 **acts as its own scan server**.

Of the pending claims, claim 21 is independent, and reads as follows (emphases added):

21. A method of scanning a document at an input scanner and recording image data derived from the document at a selected

destination computer among a population of destination computers, comprising:

entering, at a user interface associated with the input scanner, a destination of a document scanned at the input scanner, the destination including a reference to a predetermined *file location retained in the destination computer*,

the destination computer *polling the file location*; and

image data moving from the input scanner *directly* to a port associated with the destination computer.

Support for the “polling” element of claim 21 is given in the Specification as filed at page 5, lines 16-26, which reads as follows (emphases added):

A predetermined port 202 is assigned to accept the ftp files from the scanner. ...The predetermined port 202 of the destination computer 200 is associated by the daemon 204 with the root directory of the computer 200, which in turn can direct the incoming image data to a particular named folder or file 206. * * * The predetermined “target file” 206 **of the destination computer is *polled at all times to check for incoming TIFF images*** such as from an external scanner, *regardless of whether any image data was expected at any time.*

In other words, any possible destination computer effectively continuously “checks” a target file therein, to see if any image data has “landed” there. A destination computer is thus constantly “looking” in the file for incoming image data, and will thus react effectively immediately. In this way, the claimed invention enables a system in which a population of scanners can send images to a selected one of a population of computers, without the need for the scan server of the prior art.

Grounds of Rejection to be Reviewed

The following issue is presented for review by the Board of Patent Appeals and Interferences:

1. Whether claims 21-29 have been rejected under 35 USC 103(a) over Itoh in view of Lo, and further in view of Truc et al (USP 6,882,359).

Argument

Claims 21-29 have been rejected under 35 USC 103(a) over Itoh in view of Lo, and further in view of Truc et al (USP 6,882,359).

It has already been conceded by the Examiner in prosecution that the Lo and Itoh references cannot, **by themselves**, be combined to teach a system of claim 21, in particular the step of "requesting data wherein the system polls a local location and the data" (language from the Office Action). Nonetheless, the Itoh and Lo references will be discussed here, for background.

Of the pending claims, claim 21 is independent, and reads as follows (emphases added):

21. A method of scanning a document at an input scanner and recording image data derived from the document at a selected destination computer among a population of destination computers, comprising:

entering, at a user interface associated with the input scanner, a destination of a document scanned at the input scanner, the destination including a reference to a predetermined *file location retained in the destination computer*,

the destination computer *polling the file location*; and

image data moving from the input scanner *directly* to a port associated with the destination computer.

The rejection states that Itoh shows all of the recited elements of the independent claim, except "sending data [from a scanner] to a destination port of the file computer, and polling the file location." For this missing element, the rejection points to the secondary reference, Lo, at column 3, lines 28-30 thereof.

Lo, at the paragraph including the cited column 3, lines 28-30, reads as follows [emphases added]:

In ... the scan-to-file operation, ... an image file is transferred from the *scanner server* to a storage medium of the client computer. The client computer can then access this image file which is locally stored or stored on a medium which is locally mapped as a network drive by any type of image processing software or can simply store or further transfer the image file.

In Lo, the image file enters the computer *via a scanner server* interposed between the scanner and the computer. In this prior-art "scan server" model, the computer remotely polls the *scan server* for image data. So, to the extent there is *any* polling in Lo, the polling is of the **scan server**, not of a *file within* the destination computer, as in the claimed invention. **Remember:** the point of the claimed invention is that a scan server *is not needed*; and the cited references are *already* far in the realm of the irrelevant.

For this missing element of polling, the rejection points to a *third* reference: the fact a third reference is needed is highly indicative of the implausibility of the obviousness rejection. The third reference, Truc, states at column 10, lines 6-14 thereof.

In the Final Office Action, it is argued that Truc was never cited for teaching of claim limitations such as "a destination computer among a population of computers" or "image data moving from the input scanner *directly to a port* associated with the destination computer." Rather, Truc was cited simply to show the concept of polling a file location for image data. "Polling" is of course a well-known concept in computer science, and Truc may indeed show an instance

of polling a file in a scanning context; but Truc does not teach polling as polling is applied in the claimed invention: there is no polling for the purpose of network communication.

Claim 21 recites in particular:

entering, at a user interface associated with the **input scanner**, a destination of a document scanned at the input scanner, the destination including a reference to a predetermined file location retained in the destination computer;

the **destination computer** polling the file location ...

What is recited in claim 21 is beyond simple "polling": what is being polled is incoming data from a source *beyond* the destination computer, i.e., the input scanner. Communication between two distinct entities, a scanner and a destination computer, is essential to the recited polling operation. Truc is directed to a *self-contained, non-network* film scanner, in which analog slides and film strips are scanned and their images converted to digital data. There is *no pretense of network communication* in Truc, and therefore there is no idea of a "destination computer" as recited in claim 21. **Truc does not teach the claimed element of a destination computer polling a file location, because there is no destination computer in Truc.** Absent a disclosure of this limitation, claim 21, from which all other claims in the rejection are ultimately dependent, cannot be held obvious in view of these references.

In overview, the claimed invention enables direct communication of image data from a scanner to selected destination computer without need for an intermediate scan server. This ability is not even *contemplated as desirable* anywhere in the prior art. To enable this desirable outcome, the claimed invention recites polling a file location for image data coming in over a network. The Examiner must *pick and choose* among *three* references to come anywhere close to such a teaching; and the citation of the third reference, Truc, is finally inapposite, because it simply does not teach the claimed element of a *destination computer* polling a file location, because there is no destination computer in Truc.

Summary

Claimed invention: Information about a destination of a file is entered at a scanner, and each possible destination computer keeps polling a file location for incoming image data. The system enables operation *without* an intermediate scan server: this feature was emphasized in the Specification at the time of filing, and represents a major practical advantage over the prior art.

Itoh and Lo: Simply restate the known prior-art use of an intermediate scan server. As conceded by the Examiner in previous prosecution, these references cannot be combined to show a destination computer polling a file location for incoming data.

Truc: There is polling of a file, but only in the trivial context of polling a file within a closed system; no teaching of a *destination computer* polling a file location for *incoming* image data.

What is missing from the cited art:

1. a computer polling a file for image data coming from a scanner *outside the computer*.
2. the ability to enter an address of a destination computer at a scanner, without need for an intermediate scan server. This ability is so novel, it is not even *contemplated as desirable* anywhere in the prior art.

Conclusion

For the above reasons, Appellants respectfully request that the Board of Patent Appeals and Interferences reverse the rejection by the Examiner and mandate the allowance of Claims 21-29.

Respectfully submitted,

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Attachments

Appendix I - Claims on Appeal

Claims 1-20 (Cancelled)

21. (Previously Presented) A method of scanning a document at an input scanner and recording image data derived from the document at a selected destination computer among a population of destination computers, comprising:

entering, at a user interface associated with the input scanner, a destination of a document scanned at the input scanner, the destination including a reference to a predetermined file location retained in the destination computer;

the destination computer polling the file location; and

image data moving from the input scanner directly to a port associated with the destination computer.

22. (Previously Presented) The method of claim 21, there being no server operatively interposed between the input scanner and the port associated with the destination computer.

23. (Previously Presented) The method of claim 21, the destination computer not polling the port through which image data from the scanner enters the destination computer.

24. (Previously Presented) The method of claim 21, further comprising the selected destination computer activating an image acquisition program in response to detecting incoming image data in the file location.

25. (Previously Presented) The method of claim 21, further comprising a daemon within the destination computer conveying image data from the port to the file location.

26. (Previously Presented) The method of claim 21, the input scanner scanning a document including a plurality of page images.

27. (Previously Presented) The method of claim 21, further comprising the destination computer sending a template to the input scanner, the template including a network address of the computer.

28. (Previously Presented) The method of claim 27, further comprising in response to receiving a confirmation of receiving the template from the input scanner, the destination computer retaining information about the input scanner.

29. (Previously Presented) The method of claim 28, further comprising
the destination computer retaining information about the input scanner on
a list of approved input scanners; and

the destination computer refusing to accept image data from an input
scanner not associated with the list of approved input scanners.

US Application No. 09/943,397

Appendix II - Evidence

NONE

US Application No. 09/943,397

Appendix III – Related Proceedings

NONE